DOCUMENT RESUME

ED 398 203 SP 036 814

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TITLE Frequency and Levels of Reflection: Their Relationship to the Evolution of Novice through Expert Teachers' Recall.
PUB DATE Apr 96
NOTE 7p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, April 8-12, 1996).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Beginning Teachers; *Educational Objectives; Elementary Secondary Education; Higher Education; *Recall (Psychology); *Reflective Teaching; Teaching Experience
IDENTIFIERS *Reflective Practice; *Teacher Development

ABSTRACT

This paper reports on a study of the frequency and level(s) of teachers' reflection and the thoroughness of their recall of their own and their students' specific classroom behaviors. The sample consisted of 3 groups of elementar, school teachers: 4 novice student teachers, 5 teachers with 1 to 6.5 years experience, and 3 teachers with from 10 to 30 years of experience. Qualitative methods were utilized in the research. The data revealed that participants placed emphasis on different levels of and exhibited different consistencies of reflection. All teachers reflected about equally at level 1, application of pedagogical knowledge. With increasing experience, the teachers placed more emphasis on level 2, assessment of educational consequences of teaching actions and/or clarifying assumptions underlying competing educational goals, and on level 3, meeting human needs and purposes. The findings also indicated that when years of experience were equal, the more reflective teachers exhibited more thorough recall; when consistency and frequency of reflection were relatively equal, the more experienced teacher(s) demonstrated the more thorough recall. The findings suggest that teacher education programs should include curriculum and instruction to enhance novices' recall ability and encourage teacher educators to reconsider their goals so as not to expect too much from novices too soon. Also, teachers vary in their ability to reflect, regardless of their experience. (Contains 30 references.) (ND)

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ED 398 203

FREQUENCY AND LEVELS OF REFLECTION: THEIR RELATIONSHIP TO THE EVOLUTION OF NOVICE THROUGH EXPERT TEACHERS' RECALL

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A Paper Presented at the Meetings of the American Educational Research Association, New York, NY, April 8, 1996

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Objective

Accuracy/thoroughness of recall is important because it is a necessary precursor to teachers achieving the capability of effective reflection. The purpose of this qualitative study was to determine the relationship of the frequency and level(s) of reflection (Van Manen, 1977) of novice through expert teachers to the thoroughness of their recall of their own and their students' specific classroom behaviors.

Theoretical Framework

The development of effective teachers is a primary goal of teacher education programs. Reflective teaching is viewed as a paramount vehicle for enhancing the development of effective teachers; therefore, it is the aim or salient theme of a vast and increasing number of teacher education programs (Calderhead, 1989; Kennedy, 1989, Spring; Richardson, 1990; Ross, 1989; Wildman, Niles, Magliaro, & McLaughlin, 1990; Smyth, 1989). There is a general consensus that reflectivity leads to professional growth (Cruickshank, 1981; Ferguson, 1989; Frieberg & Waxman, 1990; Wildman & Niles, 1987a; and Wildman et al., 1990). For many teachers, especially experienced teachers, self-directed assessment of one's own teaching is the primary method for effecting improved teaching performance and, therefore, growing in expertise (Irvine, 1983).

The essence of the question which initiates the reflective process is recall of specifics (Eisner, 1991; Noordhoff & Kleinfeld, 1990; Smyth, 1989; and Roth, 1989), implying that accurate/thorough recall is necessary in order to proceed to subsequent questions in the reflective process. Zeichner and Liston (1987) define a reflective teacher as one who assesses the origins, purposes, and consequences of his or her work at all three levels of Van Manen's (1977) levels of reflectivity.

Typically, experienced teachers have grown in cognition in their years of teaching and possess rich schemata (Allen & Casbergue, 1995; Brown, Bransford, Ferrara, and Campione, 1983; Carter et al., 1987; Carter et al., 1988; Chi, Feltovich, & Glasser, 1981; Chase & Simon, 1973; Clarridge & Berliner, 1991; de Groot, 1965; Larkin, McDermott, Simon & Simon, 1980; Livingston & Borko, 1989; Peterson and Comeaux, 1987) which allow them to demonstrate significantly better recall ability of meaningful classroom occurrences than novices (Allen & Casbergue, 1995; Carter et al., 1987; Clarridge & Berliner, 1991; Peterson & Comeaux, 1987; Sabers, Cushing, and Berliner, 1991). Thus, novices cannot effectively answer the first question that initiates the process of reflection. This fact supports the conclusion that novice teachers have limited ability to reflect and analyze (Berliner, 1988, 1989; Livingston & Borko, 1989; Wildman & Niles, 1987a, 1987b). If novices cannot accurately/thoroughly recall and expert teachers can, then when and how do novices develop this ability to move through the levels of accurate/thorough recall of specific behaviors on their journey toward expertise?

While this body of research explores recall differences between novice and expert teachers, only in one study (Allen & Casbergue, 1995) have researchers included an intermediate group of teachers and described the cognitive development and continua related to the recall of classroom

behaviors as one moves from novice to more experienced to expert teacher. No researcher has compared the recall ability of novice through expert teachers to the frequency and level(s) of their reflectivity.

Methods/Data Source

The sample for the current study consisted of three groups of elementary school teachers: four novices, student teachers in their first or second week of actual teaching; five intermediate group teachers, teachers with 1 to 6.5 years experience; and three experts, teachers with 10 to 30 years experience. Qualitative methods were utilized in this research as described below.

The teachers were observed teaching in a natural setting for one class period by the primary researcher. The class was audiotaped, and detailed notes of the teachers' and students' specific classroom behaviors were recorded. A one hour structured interview followed the observation during which teachers recalled their own and their students' specific classroom behaviors. The interviews were audiotaped. The teachers' recall was subsequently compared to the recorded observations to determine the accuracy (correctness) and thoroughness (completeness) of their recall. Comparisons were made within groups and across groups. In addition teachers' responses to the interviews were analyzed for common themes. Teachers' elaborations during the interviews were considered their reflections on their own and their students' behaviors during the observed class. Their elaborations were analyzed to determine if the teachers reflected and, if so, how often and at which of the three levels of reflectivity described by Van Manen (1977).

Results

With the exception of an outlier in the novice group, each of the teachers demonstrated reflection at the three levels of reflectivity described by Van Manen (1977), but they placed emphasis on different levels and exhibited different consistencies of reflection. All teachers reflected about equally at level I which is primarily concerned with efficient and effective application of pedagogical knowledge. Novices and the teacher not trained in reflection with one year of experience reflected essentially equally at all three levels. With increasing experience, the teachers placed more emphasis on level II, the assessment of educational consequences of a teaching action and/or the clarifying of assumptions and predispositions underlying competing educational goals, and level III which is concerned with whether human needs and purposes are being met.

When compared to the novices, three of the intermediate group of teachers reflected twice as frequently at levels II and III as the novices. The expert teachers reflected four times more frequently than the novices at level II and three times more at level III. The experts reflected twice as often at levels II and III than the intermediate group.

When the frequency of reflection and the corresponding levels of reflectivity were compared to the thoroughness of recall of an individual or members composing a group or one group to another, the results indicated that reflection on ones' teaching experiences, i.e. ones' own behaviors and the behaviors of ones' students, is necessary for the development of thoroughness of recall, i.e. professional growth. The findings indicate that when years of experience are equal, the more reflective teacher(s) will exhibit the more thorough recall. When the consistency and frequency of reflection are relatively equal, the more experienced teacher(s) will demonstrate the more thorough recall.

Educational Significance

Resulting knowledge of the effect of the relationship between frequency and levels of teachers' reflections and teaching experience on the accuracy/thoroughness of teachers' specific recall of their own and their students' behaviors has strong implications for the design and evaluation of programs for beginning teachers. Teacher education programs that stress reflectivity need access to research results that demonstrate the shifts and changes that occur in recall ability of novices as they move toward expertise, and that pinpoint when teachers can be expected to develop the accurate/thorough recall which allows them to effectively reflect. Prior to this time, teachers may be reflecting on inaccurate/incomplete recall; and, therefore, their conclusions would not

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produce enlightenment of true problem areas or awareness of strengths. The results of this study may supply support for revision of current teacher education programs to include curriculum and instruction which most effectively promote and enhance novices' accurate/thorough recall ability, and/or necessitate teacher educators' reconsideration of their goals so as not to expect too much from novices too soon.

Data from this study can also serve as a guide to school systems and administrators when they plan inservice training programs. Too often beginning teachers are assumed to have more similar than different needs based on their novice status. These findings indicate that teachers vary in their ability to reflect, regardless of their experience. Therefore, the cognitive development of teachers must be understood by those who plan and evaluate programs so that teachers, regardless of their years of experience, can be met where they are in their development and be provided with the most appropriate activities to promote and ensure the continuance of each teacher's journey toward expertise.

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